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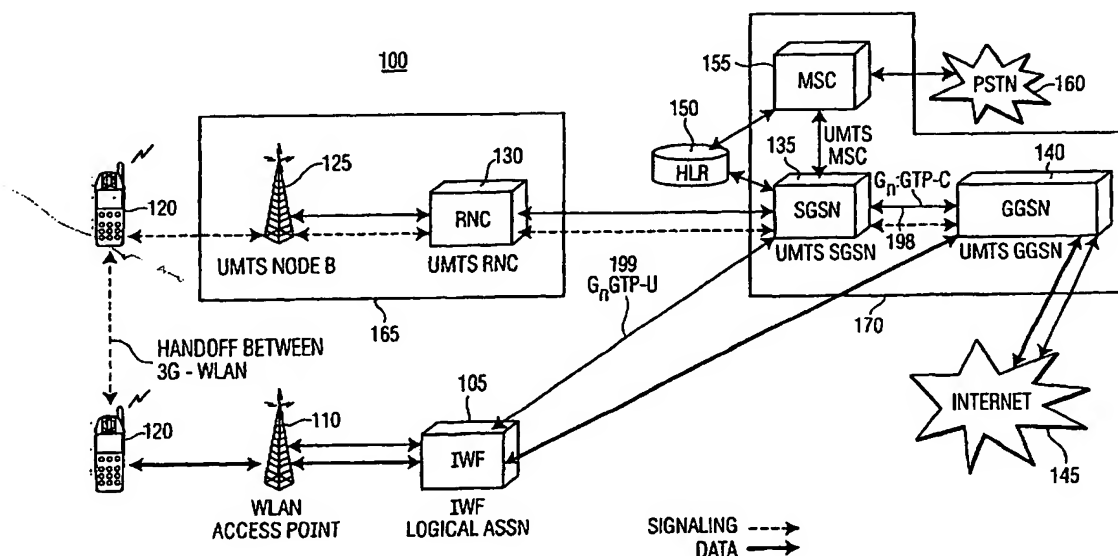
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[Continued on next page]

(54) Title: **WLAN AS A LOGICAL SUPPORT NODE FOR HYBRID COUPLING IN AN INTERWORKING BETWEEN WLAN AND A MOBILE COMMUNICATIONS SYSTEM**



(57) Abstract: There is provided a method for supporting an internetworking between a (WLAN) (110) and a mobile communications network. The mobile communications network, for example UMTS network (155), has a GPRS Support Node (140) and a Serving GPRS Support Node (135). The internetworking is facilitated by an (IWF). The method comprises the steps of establishing (199) at least one GPRS Tunneling Protocol tunnel between the IWF and the GGSN (140) for transferring data signals, and establishing (196) at least one GPRS (Tunneling Protocol) tunnel between the GGSN (140) and the SGSN (135) for transferring control signals.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/16962

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : H04Q 7/24

US CL : 370/338

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 370/338, 349, 352, 353, 354, 355, 356, 400, 401, 409

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P	US 6,414,950 B1 (RAI et al.), 02 July 2002, figures 3 and 12	1-22
X, P	US 6,445,922 B1 (HILLER et al.), 03 September 2002, figures 1-2	1-22
A, P	US 6,466,556 B1 (BOUDREAUX), 15 October 2002, figures 1-2	1-22
A, E	US 6,608,832 B2 (FORSLOW), 19 August 2003, figures 2 and 4	1-22

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

## \* Special categories of cited documents:

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document member of the same patent family

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**INTERNATIONAL SEARCH REPORT**

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**Continuation of B. FIELDS SEARCHED Item 3:**

USPAT

search terms: IWF tunnel WLAN mobile